INL News Release
FOR IMMEDIATE RELEASE
July 2, 2007

Media Contact: John Walsh (208) 526-8684

The Advanced Test Reactor's 40th anniversary celebrated

U.S. Department of Energy and Idaho National Laboratory managers, employees and former workers at the Advanced Test Reactor gathered Monday at the laboratory's desert Site to celebrate the contributions of the ATR to safe nuclear energy and advanced medicine.

The ATR, along with its predecessors, the Materials Test Reactor and Engineering Test Reactor (now both decommissioned), has produced much of the world's data on the behavior of materials and fuels in the radiation environments inside nuclear power reactors. This information has contributed significantly to the safety of commercial nuclear power plants worldwide and the outstanding performance of the U.S. nuclear Navy.

DOE-Idaho Manager Elizabeth Sellers, told employees, "The Department of Energy appreciates your dedication, work and attention to detail. You continually focus on inserting safety as well as quality into everything you do."

Among its many features, the ATR is designed as a virtual "time machine" to study the effects of radiation on reactor materials and fuels. It enables scientists to place materials in the reactor and then expose those materials to high concentrations of neutrons, to duplicate in only weeks or months the years of exposure that such materials would experience in, for example, a commercial reactor's radiation environment. This capability enables researchers to understand how materials and fuels will behave over their lifetime in many types of reactors.

The ATR's core design allows many experiments to be conducted simultaneously, with each experiment receiving a different and carefully controlled level of radiation. The ATR has been safely performing these valuable tests since 1967.

The ATR's unique design allows the reactor's internal parts to be replaced as needed, typically every 8 to 10 years.

The U.S. nuclear Navy is the ATR's primary customer. Results of those tests have allowed the Navy to maintain an outstanding safety record and to extend the at-sea life of nuclear-powered vessels.

For many years, the ATR has supported tests for a number of other customers, including the nuclear agencies of other countries and industry. In April, the DOE designated the ATR a National Scientific User Facility. As a Scientific User Facility, the ATR offers unique domestic capabilities for nuclear fuel and reactor materials system development that universities, industry and regulatory agencies will be able to utilize. Among the programs this research will support are the Global Nuclear Energy Partnership and the Next Generation Nuclear Plant.

"There is a renaissance in nuclear energy occurring. It's underway already. The first big step in ATR playing a role in that renaissance is the designation of (ATR) being a national user facility and making it more accessible to industrial researchers, as well as university researchers," said John Grossenbacher, INL laboratory director.

The ATR also has been the source of valuable medical and industrial isotopes, such as cobalt-60 used in a medical device for precise treatment of otherwise inoperable vascular deformities and brain tumors.

"I want to congratulate you all for what you have done, what you're doing and the contributions you'll make both today and tomorrow," Grossenbacher concluded.

-INL-07-023

News Release Archive